Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

Claims 1-24 (Canceled).

25. (Previously Presented) An isolated DNA molecule comprising nucleotides 1-29,574 of SEQ ID NO. 3 or an isolated DNA molecule that hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 under high stringency and which is capable of replicating autonomously as an adenovirus in sheep cells.

26. (Previously Presented) The isolated DNA molecule of claim 25, wherein the DNA molecule specifically hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 and shares at least 90% identity therewith.

27. (Previously Presented) The isolated DNA molecule of claim 25, wherein the molecule is identical to nucleotide 1-29,574 of SEQ ID NO. 3, except for differences in nucleotide sequences encoding viral polypeptides that do not alter the amino acid sequences encoded by SEQ ID NO: 3.

28. (Previously Presented) An isolated DNA molecule comprising the OAV287 inverted terminal repeat consisting of nucleotides 1 through 46 of SEQ ID NO. 3

29. (Previously Presented) An isolated DNA molecule a nucleotide sequence identical to nucleotides 1-29,574 of SEQ ID NO: 3 except for a deletion or alteration in all or part of the open reading frame that spans a unique Sal1 site at nucleotides 28673-28678 of SEQ ID NO: 3.

Claim 30 (Canceled).

31. (Previously Presented) A plasmid comprising a bacterial origin of replication and a first nucleotide sequence as set forth in nucleotides 1-29,574 of SEQ ID NO. 3 or a second nucleotide sequence that specifically hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 under high stringency conditions and which is capable of replicating autonomously as an adenovirus in sheep cells.

32 (Previously Presented) The plasmid of claim 31 wherein the second nucleotide sequence hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 and shares at least 90% identity therewith.

33. (Currently Amended) The plasmid of claim 31 or 32 wherein a third nucleotide sequence encoding a non-adenovirus polypeptide is inserted into the first or second nucleotide sequence in a region that is non-essential for ~~to~~ replication of the adenoviral genome in sheep cells.

34. (Previously Presented) The plasmid of claim 33 wherein the inverted terminal repeats of the first nucleotide sequence are linked together or the inverted terminal repeats of the second nucleotide sequence are linked together.

35. (Previously Presented) The plasmid of claim 33 wherein the third nucleotide sequence encodes resistance to an antimicrobial agent.

36. (Currently Amended) An adenoviral vector which is capable of replicating autonomously as an adenovirus in sheep cells comprising (1) a first nucleotide sequence having the sequence as set forth in nucleotides 1-29,574 of SEQ ID NO. 3 or a second nucleotide sequence that specifically hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 under high stringency conditions and (2) a third nucleotide sequence encoding at least one non-adenoviral polypeptide, wherein said third nucleotide sequence is inserted into the first or second nucleotide sequence in a region that is non essential to replication of the adenoviral genome in sheep cells.

37. (Previously Presented) The adenoviral vector of claim 36, wherein the second nucleotide sequence specifically hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 and shares at least 90% identity therewith.

Claim 38 (Canceled).

39. (Previously Presented) The adenoviral vector of claim 36 or 37, wherein the non-adenoviral polypeptide is a bacterial, viral, parasite or eucaryotic polypeptide.

40. (Previously Presented) The adenoviral vector of claim 39, wherein the non-adenoviral polypeptide is selected from rotavirus VP7sc antigen, *Trichostrongylus colubriformis* 17 kD antigen, *Taenia ovis* 45W antigen and *Lucila cuprina* PM95 antigen.

41. (Canceled)

42. (Currently Amended) A method of ~~inducing an immune response in a mammal~~ delivering a vaccine antigen to a grazing mammal for vaccination thereof comprising administering to the mammal an adenoviral vector which is capable of replicating autonomously as an adenovirus in sheep cells, said adenoviral vector comprising (1) a first nucleotide sequence as set forth in nucleotides 1-29,574 of SEQ ID NO. 3 or a second nucleotide sequence that specifically hybridizes to the complement of nucleotide 1-29,574 of SEQ ID NO. 3 under high stringency conditions; and (2) a third nucleotide sequence encoding at least one non-adenoviral polypeptide, wherein the adenoviral vector transfects at least one cell of the mammal and the at least one polypeptide is expressed therein.

43. (Canceled)

44. (Currently Amended) The method of claim ~~43~~42, wherein the adenoviral vector is administered to a sheep.

45. (Currently Amended) An adenoviral vector which is capable of replicating autonomously as an adenovirus in sheep cells, comprising (1) a first nucleotide sequence as set forth in SEQ ID NO. 3 or a second nucleotide sequence that specifically hybridizes to the complement of nucleotides 1-29,574 of SEQ ID NO. 3 under high stringency conditions; and (2) a third nucleotide sequence encoding an RNA molecule, wherein said third nucleotide sequence is inserted into the first or second nucleotide sequence in a region that is non essential to replication of the adenoviral genome in sheep cells.

46. (Previously Presented) The adenoviral vector of claim 45, wherein the RNA molecule is an antisense RNA molecule or ribozyme.

47. (Canceled)

48. (Previously Presented) A plasmid comprising a DNA molecule having the nucleotide sequence as set forth in SEQ ID NO. 3.

49. (Currently Amended) A plasmid comprising a DNA molecule having a first nucleotide sequence that specifically hybridizes to nucleotides 1-29574 of SEQ ID NO. 3 under high stringency and a second nucleotide sequence encoding a bacterial origin of replication, wherein the first nucleotide sequence comprises ovine adenovirus inverted terminal repeat sequences that are linked by a third nucleotide sequence which contains at least one unique restriction enzyme site that is not present in the first nucleotide sequence, wherein said second nucleotide sequence is inserted into the third nucleotide sequence or the first nucleotide sequence in a region that is not essential to replication of the first sequence as an adenovirus in sheep cells, and wherein ~~said plasmid~~ the first nucleotide sequence is capable of replicating autonomously as an adenovirus in sheep cells.

50. (Previously Presented) A plasmid comprising the DNA molecule of claim 29.

51. (Previously Presented) A vector comprising the DNA molecule of claim 29.